

REMARKS

Claims 1-21 and 23-31 are pending in the present application and were examined.

Claims 1-12, 14, 16, 18, 19, 21 and 23 stand rejected and Claims 13, 15-18 and 20 are objected to. In response, Claims 4, 9, 13, 17 and 31 are amended, no Claims cancelled and no Claims are added. Applicants respectfully request reconsideration of pending Claims 1-21 and 23-31 in view of at least the following remarks. Reconsideration and withdrawal of the rejections of record are requested in view of such amendments and the following discussion.

I. Objections to the Claims

The Examiner has objected to Claims 13 and 17 because of various informalities.

Applicants respectfully request the Examiner's withdrawal of the objections to Claims 13 and 17 in view of Applicants' amendments.

Regarding Claim 13, Claim 13 has been amended as suggested by the Examiner.

Accordingly, in view of Applicant's amendment to Claim 13, Applicant respectfully requests that the Examiner reconsider and withdraw the objection to Claim 13.

Regarding Claim 17, Claim 17 is amended to replace "is greater than the deactivate the occupancy level" with --is greater than the deactivation occupancy level--. Accordingly, in view of Applicant's amendment of Claim 17 Applicant respectfully requests that the Examiner reconsider and withdraw the objection to Claim 17.

II. Claims Rejected Under 35 U.S.C. §112

The Examiner has rejected Claims 4, 9 and 31 for lacking sufficient antecedent basis for the limitation in the Claim. Applicants have amended Claims 4, 9 and 31 to provide sufficient antecedent basis. Applicants respectfully request the Examiner's withdrawal of the rejection to Claims 4, 9 and 31 in view of Applicants' amendments.

Regarding Claims 4 and 9, Claims 4 and 9 are amended at line 3 to replace the reference to "a memory" with --the main memory--. Please note that antecedent basis is provided for "the main memory" by the previously resided feature of detecting a memory, subsystem level according to at least one bus transaction directed to a main memory, as recited by Claim 1 and Claim 6 from which Claims 4 and 9 depend.

Accordingly, in view of Applicant's amendment to Claims 4 and 9, Applicants respectfully submit that Claims 4 and 9, as amended, particularly point out and distinctly Claim the subject matter which Applicant regards as the invention as required to comply with U.S.C. § 112 second paragraph. Therefore, in view of Applicant's amendment to Claims 4 and 9 Applicants respectfully request that the Examiner reconsider and withdraw the 35 U.S.C. § 112 second paragraph rejection of Claims 4 and 9.

Regarding Claim 31, Claim 31 is amended to remove reference to "the memory" accordingly, Claim 31 as amended recites:

selecting a new pre-fetch depth according to the comparing of the detected memory subsystem response level and the activation and the deactivation occupancy levels.

Accordingly, in view of Applicant's amendment to Claim 31, Applicant respectfully submits that Claim 31, as amended, particularly points out and distinctly Claims the subject matter which Applicant regards as the invention, as required to comply with 35 U.S.C. § 112 second paragraph. Consequently, for the reasons provided above, Applicants respectfully request the Examiner reconsider and withdraw the 35 U.S.C. § 112 second paragraph rejection of Claim 31.

III. Claims Rejected Under 35 U.S.C. §102

The Examiner has rejected Claims 1-12, 14, 16, 18-19, 21 and 23-31 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application No. 2004/0205298 of Schulz ("Schulz"). Applicants respectfully traverse this rejection.

Regarding Claims 1 and 6, Claims 1 and 6 recite the detection of a memory response level according to at least one bus transaction directed to main memory and adjusting a prefetch in depth as changes in the memory subsystem response level are detected. The features of detecting of a memory subsystem response level according to bus transactions directed to main memory and the adjusting of the prefetch depth as changes memory subsystem response are detected were conceived in the United States at least as early as January 19, 2003, as evidence by the "CFB Second Sector Prefetch" document and Invention Disclosure Form accompanying the Declarations of each inventor under 37 C.F.R. § 1.131, which are submitted to the Patent Office in conjunction with this response to the Office Action mailed February 27, 2004.

Applicants respectfully submit the January 11, 2003 conception date precedes the priority date of Schulz of January 29, 2003. In view of the 1.131 Declarations submitted herewith, Schulz cannot properly be cited against the depending claims. Accordingly, since Schulz cannot be properly cited against the pending claims, Applicants respectfully request the Patent Office withdraw the § 102(e) rejection of independent Claims 1 and 6.

Regarding Claims 2-5 and 7-10 Claims 2-5 and 7-10 based on their dependency from Claims 1 and 6 respectively for at least the reasons stated above with respect to Claims 1 and 6 cannot be anticipated by Schulz.

Regarding independent Claim 11, independent Claim 11 recites the adjustment of a prefetch depth according to a detected memory subsystem response level. Claims 12-20 depend from Claim 11.

Independent Claim 11 is also supported by the conception date of January 11, 2003 as evidenced by the affidavits of the inventors under 37 C.F.R. § 1.131, submitted herewith. Accordingly, similar to independent Claims 1 and 6, Schulz cannot be properly cited against independent Claim 11. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of Claims 11, 12, 14, 16, 18 and 19 under 35 U.S.C. § 102(e) as anticipated by Schulz.

Regarding independent Claim 21, independent Claim 21 recites prefetch control logic and prefetch depth logic. To adjust a prefetch depth according to a detected memory subsystem response level. Claims 23-25 depend from Claim 21. These claims are entitled to the date of conception of January 11, 2003 as supported by the affidavits filed by the inventors under 37 C.F.R. § 131, as provided herewith.

Therefore, Schulz cannot be properly cited against Claims 21 and 23-25. Consequently, since Shultz cannot be properly cited against Claims 21 and 23-25, Applicants respectfully request that the Patent Office withdraw the rejection of Claim 21 and 23-25 under 35 U.S.C. § 102(e) as anticipated by Schulz.

Regarding Claim 26, Claim 26 recites a prefetch control logic and prefetch depth adjustment logic which are analogous to the previously recited features of amended Claim 21. Claims 27-30 depend from Claims 26.

Applicants respectfully submit that Claim 26, as well as dependent Claims 27-30, are entitled to the January 11, 2003 conception date as supported by the affidavits filed by the inventors under 37 C.F.R. § 1.131.

Hence, for at least the reasons indicated above, Schulz cannot be properly cited against Claims 26-30. Accordingly, Applicants respectfully request the Patent Office withdraw the rejection of Claims 25-30 under 35 U.S.C. § 102 as anticipated by Schulz.

Regarding Claim 31, Claim 31 recites analogous claims features to amended Claims 1 and 6. Accordingly, Claim 31 is also supported by the conception date of January 1, 2003 as evidenced by the affidavits of the inventors which are submitted herewith under 37 C.F.R. § 1.131.

Therefore, similar to independent Claims 1 and 6, Schulz cannot be properly cited against Claim 31. Consequently, Applicants respectfully request that the Patent Office withdraw the rejection of Claim 31 under 35 U.S.C. § 102(e) as anticipated by Schulz.

IV. Allowable Subject Matter

The Examiner has indicated that Claims 13, 15, 17 and 20 are objected to as being dependent upon a rejected base Claim, but would be allowable if rewritten in independent form, including all of the limitations of the base Claim and any intervening Claims. However, since Schulz cannot not be cited against independent Claim 11, Claims 13, 15, 17 and 20, based on their dependency from Claim 11 are also allowable.

CONCLUSION

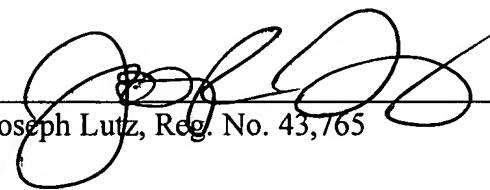
In view of the foregoing, it is submitted that Claims 1-21 and 23-31, as amended, patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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Dated: July , 2006

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CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on July 28, 2006

Melissa Stead
Melissa Stead July 28, 2006